

mentioned in the Bull. No. 9 of the Boston Society of Natural History, April, 1917, where the exact size, $10\frac{3}{8}$ in greatest diameter was given, as there was a discrepancy of $1\frac{3}{4}$ inches in the two accounts in the Proceedings. The writer is indebted to the Society for the use of the figure illustrating this article.

In regard to the nomenclature, it seems hardly necessary to enter into any discussion when we consider that we are not dealing with a true shell, but a shell-like structure confined to the female, and only in part a secretion of the mantle, for a portion of it is formed by the two expanded tentacles. Internal partitions are lacking and the structure serves as a nest for the eggs. Tryon, in the Manual of Conchology, places the Indo-Pacific *A. compressa* Blainville (*A. maxima* Gualt.) in the synonymy under *A. argo* Linn., of the Mediterranean. In the absence of a thorough knowledge of the animals it seems best to keep the various forms described from distant regions separate until such time as future investigations prove them to be either the same or distinct.

In this connection I would like to call the attention of readers to a rival of the above specimen. It is a very large example of *Argonauta nodosa* Solander, in the American Museum of Natural History, New York, and measures $8\frac{5}{8}$ by 11 inches. I am indebted to Mr. Arthur Jacot for these measurements.

SOME AURICULIDAE AND PLANORBIDAE FROM PANAMA.

BY HENRY A. PILSBRY.

The Panamic fauna has a particularly rich and interesting group of Auriculidae. The following new forms were found among the species collected by Mr. James Zetek.

DETRACIA ZETEKI, n. sp. Figs. a, b, c.

The shell is oval with short, almost straightly conic spire and minute, mucronate apex; dusky buff, the spire, a band near the suture and another near the base, carob brown. Surface glossy, rather closely marked with ripples of growth. Whorls of the spire narrow and flat, the greatest convexity of the last whorl above the middle. Aperture extremely narrow, having a

white, lirate callus a short distance within the outer lip. The very short columella bears a thin, wide, entering and descending lamella. Above it, on the lower part of the parietal wall, there is a low, subtriangular callus. It is much more prominent in young than in adult shells.

Length 8.6, diam. 5, length of aperture 6.7 mm.; 11 to 12 whorls.

Panama City and Paitilla, near by.

This species is very peculiar by its many narrow whorls, very narrow aperture, and the large, inwardly descending columellar lamella. It seems remarkable that it was not found by Professor Adams, but nothing described in his catalogue agrees with it. Perhaps it is his unidentified No. 316.

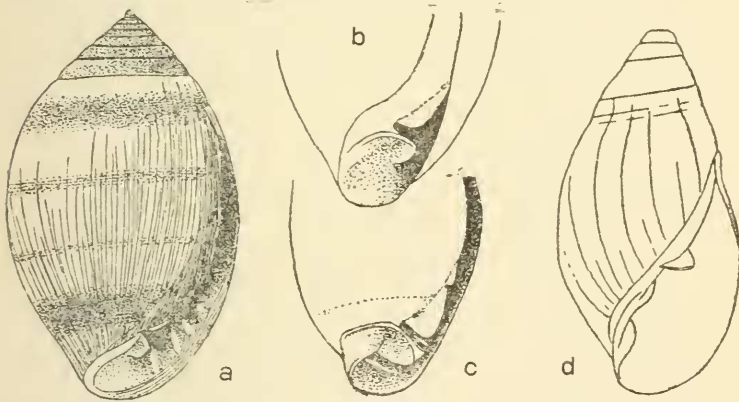


Fig. *a* represents the type; fig. *b* is the basal part of the same specimen rolled more towards the left. Fig. *c* is the lower part of a young specimen, to show the larger lamellae of that stage.

PHYTIA BREVISPIRA. Fig. *d*.

The shell is oblong-conic, not very solid, cinnamon-brown, glossy marked with weak growth-lines only. The spire is straightly conic, shorter than the aperture; whorls very slightly convex, the last somewhat concave below the suture, with one or two spiral lines in the concavity defining a wide sutural margin. The aperture is pinched in above, becoming moderately wide and rounded below, the outer lip thin, without in-

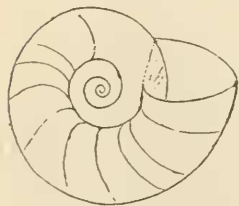
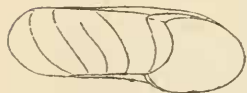
ternal folds or callus. There is a strong, deeply entering diagonal parietal lamella, a smaller one below it; columella terminating in a spirally entering lamella.

Length 8, diam. 4.1, length of aperture 5.1 mm. (fig. d, apex lost).

Panama City and Paitilla, near the city, collected by James Zetek, 1917. Also Taboga Island.

This species stands near *P. triplicata* (Anton) and *P. acuta* (Orb.) both of which have similar teeth. It is, however, decidedly narrower than the first, wider than the second, so that while I hesitate to add another species to this genus, it appears that none of those described will receive it. *Phytia rhoadsi* (Pils.), described as a *Marinula*, and *P. setifer* (Caop.) are more northern species, the former somewhat related to *P. brevispira*. In this species the aperture is longer than the spire, as in *Marinula*, but the other characters are decidedly those of *Phytia* (Alexia).

PLANORBIS ISTHMICUS, n. sp.



The shell is compressed, the thickness about one-third of the diameter, thin, very pale brown, somewhat transparent, glossy. Concavity of the right side showing three whorls and a central pit, that of left side shallow, showing $4\frac{1}{2}$ whorls, the last whorl more convex near the sutures, rounded peripherally, not deflected towards the left near the aperture. Sculpture of fine growth-lines, very distinctly decussated by fine spiral lines on the inner whorls, the spirals weak, in part obsolete, on the last whorl. The aperture is oblique, heart-shaped, the lip thin.

Diam. 10.5, alt. 3.7 mm.

Panama City, in Chinese wells. Collected by James Zetek, Sept., 1918.

Planorbis liebmanni Phil., *maya* and *orbiculus* Morel., are flatter shells, with the spire wider. *P. boucardianus* Prest. has a more oblique

aperture, no spiral striation, and is smaller. *P. fieldii* Tryon is a much smaller shell without spiral lines, and higher relative to its diameter.

Probably all of this group should be regarded as toothless forms of *Planorbula*.

GUATEMALAN NOTES.

BY A. A. HINKLEY.

Coelocentrum gigas Von Martens, identified by Dr. H. A. Pilsbry as a dark variety,¹ is the largest land shell the writer ever had the pleasure of hunting. On Feb. 20, 1913, the first dead specimen was found by a large log in a banana field. Probably an hour was spent searching for a live one but without success. Leaving the banana field, I followed up a branch of the Cavech River to where it issued from the mountain side. The labor of working through jungle and over rocks was rewarded by finding the finest specimens of *Pachycheilus indiorum* which I secured. From here the return was around the side of another mountain, heavily wooded; on this mountain 5 living *C. gigas* were found. This was considered a great find.

The next day another place was visited beyond the mouth of the Cavech River to where the mountain came out to the shore of the gulf. After working through the thick undergrowth at the foot of a mountain, the vegetation was more open, making it easier to climb up or down. The first shell found was a fine *C. gigas* in the act of depositing eggs in a round pit about $\frac{3}{4}$ of an inch across, and probably a half-inch deep, scooped out of the mellow earth and containing 35 to 40 eggs.

The best part of the day was spent on this mountain, looking for these shells, of which 19 were secured. They were nearly always partly covered with leaves. No more nests of eggs were found, but others were seen which had been destroyed by some enemy.

¹ The specimens are not "yellowish gray," as von Martens described it, but between walnut brown and burnt umber.